REMARKS

I. Amendment to the claims

Claim 1:

In order to more clearly define the present invention, claim 1 has instantly been amended. Specifically, the average pore diameter (9.7 to 20 μm) of the dried porous crumbs has instantly been introduced into claim 1. Support for the lower limit (9.7 μm) of the average pore diameter is found in Example 3 of the present application (see Table 1 on page 102 of the present specification), and support for the upper limit (20 μm) is found at page 29, lines 8 to 10 of the present specification.

Claims 2 and 8:

Claim 2 has been amended to clarify that the dehydration of the wet porous crumbs should be performed without using centrifugal dehydrator as well as a mechanical compression type dehydrator (such as a roll type or a Banbury type dehydrator or a screw extruder type compression dehydrator).

Further, the same amendment as effected in claim 2 has also been effected in claim 8.

New claims 9 and 10:

Support for each of new claims 9 and 10 is found at page 29, lines 10 to 14 of the present specification.

II. Rejections under 35 U.S.C. § 103

In the outstanding Office Action dated September 22, 2008, the Examiner maintains the rejection of claims 1 and 8 under 35 U.S.C. 103(a) as being unpatentable over the Kusano reference in combination with Encyclopedia, and also maintains the rejection of claims 2 to 8 under 35 U.S.C. 103(a) as being unpatentable over the Kusano reference in combination with US Patent 4,423,207 to Flock et al. Specifically, in response to the Applicants' arguments in the previous responses, the Examiner states:

that the invention disclosed in illustrative examples of Kusano is different from the

claims process of claims 2 to 7 to the extent that the dehydration step in illustrative examples is performed using a mechanical compression type dehydrator, now excluded from claimed step 3,

that this is the only difference between the claimed process and the process disclosed in illustrative examples of Kusano,

that, however, the claimed dehydration steps are well known in the art of polymer chemistry and general chemistry, and

that the proposed substitution of one known method for another is no more that a use of known technique to improve similar devices (methods, or products) in the same way; or applying a known technique to a known device (method, or product) ready for improvement to yield predictable results; which rationale of obviousness is fully consistent with the *KSR* decision[1],

that, therefore, a strong *prima facie* case of obviousness of the claimed invention over the cited references has been established.

Applicants respectfully traverse for the following reasons:

Contrary to the Examiner's statement referring to the *KSR* decision, there is no prior art reference which teaches or suggests that the substitution of the specific dehydration step (recited in claim 1 of the present application) for the mechanical compression (performed in the illustrative examples of the Kusano reference) results in any improvement. That is the reason why only a mechanical compression type dehydrator is employed in the illustrative examples of the Kusano reference. As clearly recited in amended claim 1 of the present application, the dried porous crumbs of the present invention have a specific average pore diameter (9.7 to 20 μm) due to the employment of the specific dehydration step as recited in claims 2 and 8, whereby the dried porous crumbs of the present invention exhibit an excellent oil-absorbing capability. None of the cited references teach or suggest that the employment of the specific dehydration step recited in claims 1 and 8 results in the structural feature (i.e., specific pore diameter recited in claim 1) which contributes to the excellent oil-absorbing capability. Therefore, the present invention is not obvious over the cited references. On this point, more specific explanations are made below.

[1] *KSR Int'l Co. v Teleflex Inc.*, 127 S. Ct. 1727 (2007).

Claim 1

With respect to the dried porous crumbs of claim 1, as mentioned above, the average pore diameter thereof has been limited to "9.7 to 20 μm". On the other hand, the Kusano reference has no teaching or suggestion about the average pore diameter of the crumbs. Further, from the pore diameter distribution described in claim 1 of the Kusano reference, the average pore diameter of the crumbs can be estimated to be much smaller than "9.7 to 20 μm" recited in claim 1 of the present application, more specifically, about 6.5 μm at the largest, as explained below in detail.

In claim 1 of the Kusano reference, this reference has the following description about the pore diameter distribution:

> "a ratio of the sum of the volume of micropores having a pore diameter within the range from 0.14 to 3.9 μm based on the total volume of the micropores of more than 8 %."

The pore diameters of crumbs of a hydrogenated block copolymer should generally exhibit a normal distribution unless a special means is intentionally employed to bias the distribution or to form a bi-modal or multi-modal distribution. Since the Kusano reference has no teaching or suggestion about such special means, it is assumed that the pore diameters of the crumbs obtained in the Kusano reference exhibit a normal distribution. Further, since the Kusano reference provides no information on the specific morphology (such as length) of the pores which influence the volume of each pore, it is assumed that the pores of the crumbs of the Kusano reference have the same length and, hence, the volumes of the pores are proportional to the diameters thereof. On these assumptions, the approximate largest value of the average pore diameter in the Kusano reference can be estimated as follows.

(II-1) Table showing the areas under the standard normal curve for values between 0 and the relative z-score

(http://www.easycalculation.com/statistics/normal-ztable.php)

Z table

How to use Z table:

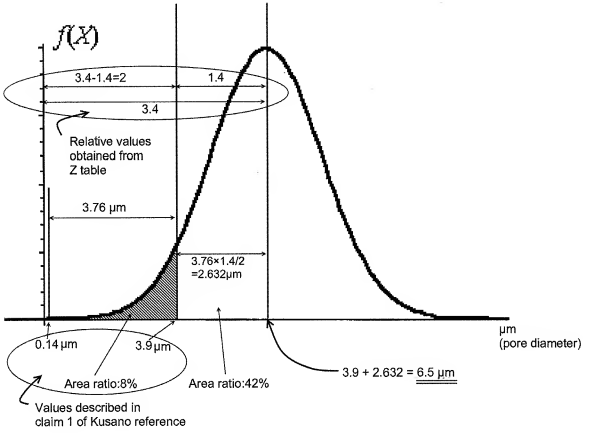
The values inside the given table represent the areas under the standard normal curve for values between 0 and the relative z-score. For example, to determine the area under the curve between 0 and 2.36, look in the intersecting cell for the row labeled 2.30 and the column labeled 0.06. The area under the curve is .4909.

z	0	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
0	0	0.004	0.008	0.012	0.016	0.0199	0.0239	0.0279	0.0319	0.0359
0.1	0.0398	0.0438	0.0478	0.0517	0.0557	0.0596	0.0636	0.0675	0.0714	0.0753
0.2	0.0793	0.0832	0.0871	0.091	0.0948	0.0987	0.1026	0.1064	0.1103	0.1141
0.3	0.1179	0.1217	0.1255	0.1293	0.1331	0.1368	0.1406	0.1443	0.148	0.1517
0.4	0.1554	0.1591	0.1628	0.1664	0.17	0.1736	0.1772	0.1808	0.1844	0.1879
0.5	0.1915	0.195	0.1985	0.2019	0.2054	0.2088	0.2123	0.2157	0.219	0.2224
0.6	0.2257	0.2291	0.2324	0.2357	0.2389	0.2422	0.2454	0.2486	0.2517	0.2549
0.7	0.258	0.2611	0.2642	0.2673	0.2704	0.2734	0.2764	0.2794	0.2823	0.2852
0.8	0.2881	0.291	0.2939	0.2967	0.2995	0.3023	0.3051	0.3078	0.3106	0.3133
0.9	0.3159	0.3186	0.3212	0.3238	0.3264	0.3289	0.3315	0.334	0.3365	0.3389
1	0.3413	0.3438	0.3461	0.3485	0.3508	0.3531	0.3554	0.3577	0.3599	0.3621
1.1	0.3643	0.3665	0.3686	0.3708	0.3729	0.3749	0.377	0.379	0.381	0.383
1.2	0.3849	0.3869	0.3888	0.3907	0.3925	0.3944	0.3962	0.398	0.3997	0.4015
1.3	0.4032	0.4049	0.4066	0.4082	0.4099	0.4115	0.4131	0.4147	0.4162	0.4177
1.4	0.4192	0.420	0.4222	0.4236	0.4251	0.4265	0.4279	0.4292	0.4306	0.4319
1.5	0.4332	0.4345	0.4357	0.437	0.4382	0.4394	0.4406	0.4418	0.4429	0.4441
1.6	0.4452	0.4463	0.4474	0.4484	0.4495	0.4505	0.4515	0.4525	0.4535	0.4545
1.7	0.4554	0.4564	0.4573	0.4582	0.4591	0.4599	0.4608	0.4616	0.4625	0.4633
1.8	0.4641	0.4649	0.4656	0.4664	0.4671	0.4678	0.4686	0.4693	0.4699	0.4706
1.9	0.4713	0.4719	0.4726	0.4732	0.4738	0.4744	0.475	0.4756	0.4761	0.4767
2	0.4772	0.4778	0.4783	0.4788	0.4793	0.4798	0.4803	0.4808	0.4812	0.4817
2.1	0.4821	0.4826	0.483	0.4834	0.4838	0.4842	0.4846	0.485	0.4854	0.4857
2.2	0.4861	0.4864	0.4868	0.4871	0.4875	0.4878	0.4881	0.4884	0.4887	0.489
2.3	0.4893	0.4896	0.4898	0.4901	0.4904	0.4906	0.4909	0.4911	0.4913	0.4916
2.4	0.4918	0.492	0.4922	0.4925	0.4927	0.4929	0.4931	0.4932	0.4934	0.4936
2.5	0.4938	0.494	0.4941	0.4943	0.4945	0.4946	0.4948	0.4949	0.4951	0.4952
2.6	0.4953	0.4955	0.4956	0.4957	0.4959	0.496	0.4961	0.4962	0.4963	0.4964
2.7	0.4965	0.4966	0.4967	0.4968	0.4969	0.497	0.4971	0.4972	0.4973	0.4974
2.8	0.4974	0.4975	0.4976	0.4977	0.4977	0.4978	0.4979	0.4979	0.498	0.4981
2.9	0.4981	0.4982	0.4982	0.4983	0.4984	0.4984	0.4985	0.4985	0.4986	0.4986
3	0.4987	0.4987	0.4987	0.4988	0.4988	0.4989	0.4989	0.4989	0.499	0.499
3.1	0.499	0.4991	0.4991	0.4991	0.4992	0.4992	0.4992	0.4992	0.4993	0.4993
3.2	0.4993	0.4993	0.4994	0.4994	0.4994	0.4994	0.4994	0.4995	0.4995	0.4995
3.3	0.4995	0.4995	0.4995	0.4996	0.4996	0.4996	0.4996	0.4996	0.4996	0.4997
3.4	0.4997	0.4997	0.4997	0.4997	0.4997	0.4997	0.4997	0.4997	0.4997	0.4998

In this Z table, the values used in item (II-2) below for obtaining a pore diameter distribution are circled.

(II-2) Graph representing pore diameter distribution in the Kusano reference

The pore diameter distribution in the Kusano reference is shown in Fig. A below, which is obtained by using the values described in claim 1 of the Kusano reference and the values shown in Z table of item (II-1) above.



Thus, the average pore diameter of the crumbs of the Kusano reference is estimated to be about 6.5 μm at the largest, which is much smaller than "9.7 to 20 μm" recited in claim 1 of the present application.

From the above, it is apparent that the Kusano reference has no teaching or suggestion

about the dried porous crumbs of claim 1 of the present application.

Therefore, it is apparent that the dried porous crumbs recited in claim 1 of the present invention are neither anticipated nor obvious over the Kusano reference.

Claims 2 to 8

As mentioned in item I. above, each of claims 2 and 8 has been amended to clarify that the dehydration of the wet porous crumbs should be performed without using centrifugal dehydrator as well as a mechanical compression type dehydrator (such as a roll type or a Banbury type dehydrator or a screw extruder type compression dehydrator).

On the other hand, as dehydration method, the Kusano reference only describes dehydration using "a centrifuge or a compressing dehydrator such as a roll, a Banbury dehydrator or a screw extrusion type squeezing dehydrator". Further, in the Examples of the Kusano reference, only a compressing type dehydrator is used.

Needless to say, neither the Kusano reference nor the secondary references (i.e., the Encyclopedia and the Flock reference) has any teaching or suggestion that the application of the specific dehydration step recited in claims 2 and 8 of the present application is necessary to achieve the specific average pore diameter recited in claim 1 which contributes to the excellent oil-absorbing capability of the dried porous crumbs.

Therefore, it is apparent that claims 2 to 8 of the present invention is neither anticipated by nor obvious over the Kusano reference.

In view of the foregoing, Applicant believes the pending application is in condition for allowance. A Notice of Allowance is earnestly solicited.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Monique T. Cole, Reg. No. 60,154 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

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